

Persons With Disabilities Vulnerability to Disaster Prevention Strategies: Lessons for Disaster Management and Reduction Planners

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ABSTRACT: In this modern world through several international and national legal instruments the participation of persons with disabilities in the socio-economic and political development of their respective societies with limited impediments has become a fundamental principle. Therefore, there cannot be any genuine justification for the relaxation of this human right especially when disasters strike. Unfortunately, in most nations, the policies and legislations thrust of disaster prevention, reduction; and management in many instances are framed towards abled-bodied persons.

Of recent, the world has witnessed increasing intensity and frequency of weather associated calamities and emergency situations mainly caused by unprecedented climate change. There are some scientific evidences that suggest that persons with disabilities are two to four times more likely to be injured or die when a disaster strikes compare to the rest.

The rationale for this systematic literature review was to interrogate the methods of preventing persons with disabilities vulnerability to disaster, share knowledge to spark and inspire processes that will usher rapid growth from all directions. A systematic review of the literatures using information collected from different sources was actuated. Google search engine and others were used to search for articles. Only peer-reviewed articles published after 1999 were selected except extracts of fundamental mileage. However, articles published by staunch international organizations working in the area for years and produced indefatigable knowledge were stealthily appraised.

The study revealed that to prevent persons with disabilities vulnerability to disaster there are different strategies that can be applied which include: political will, disability awareness raising, taking ownership of strategies, physical barriers removal, attitudinal barriers elimination, training on disability and related matters, promotion of human rights principles, empowerment of organizations of/for persons with disabilities, regular conduct of studies, poverty reduction, disability friendly information sharing; and persons with disabilities participation in national strategies formulation.

KEYWORD: disability, disaster, vulnerability, prevention, strategies, persons with disabilities.

INTRODUCTION

Persons with disabilities like any other person in the society has the fundamental human rights to effectively and efficiently participate in the socio-economic and political development of their communities without an iota of discrimination. In the same vein; they have the same rights to enjoy all services in the societies not just because they are citizens but also as taxpayers. Therefore, denying them these rights especially during disaster is never justifiable and tantamount to gross violation of their fundamental human rights(Wisner, 2016). In general terms, communities' vulnerability to disaster and emergency situations is generally influenced by several and different factors that include personal and structural ones, in which the later consist of social, political, economic; and cultural determinants that either mitigate or exacerbate the situation(Kulatunga, 2010).

However, occasionally persons with disabilities do experience some difficulties to stay safe and secured due to several factors. Factors mostly linked to the unprecedented increased in vulnerability of persons with disabilities to disaster are numerous and include lack of political will, poverty, inadequate and/or inaccessible information and knowledge, inaccessible built environment, lack of the relevant social networks; and pre-existing disability conditions(Smith, Jolley, & Schmidt, 2015). These factors among others ultimately contribute to their heighten vulnerability and also failing to make the best use of available services and supports(Wisner, 2016). In most cases during and after disaster, national and international agencies provide support, however, most of them are not accessible to persons with disabilities because of their special needs justifying the urgency for inclusive disaster management and reduction strategies(Wisner, 2016).

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METHODOLOGY

A systematic review of the literatures using information collected from different sources was actuated. Google search engine, google scholar, web of science, scopus database, etc. were used to search for these articles. During the search numeration combinations of words and phrases were used to ensure articles reflect the most recent knowledge and scholarly works. The systematic searches beget varied and voluminous articles which had to be sieved not only to meet the inclusion and exclusion criteria but to ensure the fundamental objectives of the study are wrangled.

Therefore, only peer-reviewed scholarly publications published after 1999 were selected except extracts perceived to be of basal mileage to the study. However, articles published by staunch international organizations known to have been working in disability and disaster for years and has produced indefatigable knowledge in the area and related issues were stealthily appraised.

INCLUSION AND EXCLUSION PROCEDURES

The underneath procedures were adopted in articles inclusion. That is, only:

1. Peer-reviewed scholarly articles on disability and disaster.
2. Peer-reviewed scholarly articles published from 1999 to 2024.
3. Articles on international or regional perspectives on disability and disaster related issues.
4. Articles on disability and disaster related issues published by international organizations with years of meritorious experiences in the promotion of inclusive disaster management and reduction programming.

To exclude some articles from the review, the below captioned criteria were applied. That is:

1. Non-peer reviewed articles.
2. Articles published before 1999 unless critical and impactful.
3. Media generated articles including newspapers.
4. Articles not published in the English language.

In spite of the fact that both qualitative and quantitative articles were trawled, only 56 articles out of 235 were qualified for review which is largely due to a dearth of data. In essence, only peer-reviewed articles and publications by international organizations considered trustworthy because they occasioned standard, ethical; and robust studies were reviewed.

DISCUSSIONS

The literature review has revealed a wide range of preventive methods that can be applied to prevent if not minimize persons with disabilities vulnerability to disaster. To discuss them, they are classified into different preventive strategies consisting of: political will, disability awareness raising, taking ownership of strategies, physical barriers removal, attitudinal barriers elimination, training on disability and related matters, promotion of human rights principles, empowerment of organizations of/for persons with disabilities, regular conduct of studies, poverty reduction, disability friendly information sharing; and participation in national strategies formulation.

Political will

Governments all over the globe including the developed nations are struggling with numerous issues to be addressed for the betterment of their respective communities(University, 2018). To effectively and efficiently address these problems they must among other things prioritize issues. However, of recent, most governments being national or local government authorities have commenced experiencing difficulties in mobilizing the required resources to implement international and national agendas including disaster prevention and reduction(The Gambia, 2024). Therefore, most programmes that governments are able to implemented are mostly generalistic in nature, seemingly short of inclusive thoughts and design(John Twigg, 2018). Thus, increasing the vulnerability of persons with disabilities being left behind and becoming one of the hardest hit communities when calamities including disaster strikes. For inclusive thinking, programming; and implementation to be central in governments approach to development, there must be some political commitment/willingness from the highest level(Jonatan A. Lassa, Akhilesh Surjan, Mely Caballero-Anthony, 2018) concurring with: to ensure persons with disabilities enjoy the same rights like all citizens before, during; and after disasters, there must be the required political will, the physical environment must be accessible, inclusive support services provided, the high rate of poverty and disability addressed, disability related education conducted in all communities including government institutions with the active participation of persons with disabilities and relevant stakeholders(Kett, 2018).

Disability awareness raising

Acquiring quality and relevant information at the right time is one of the most critical tools in development especially in this modern information and technology driven world(Manoj Samantray, 2024). With the right information, one can plan and predict the future with some degree of accuracy (Sanders, 2000). To minimize, if not to prevent, calamities including disasters in our societies, it is fundamental that communities are educated via different methods including public sensitization and awareness raising about the causes, negative impacts; and strategies of its prevention(Hargono A, Artanti KD, Astutik E, Widodo PP, Trisnawati AN, Wardani DK, 2023). Thus, to reduce communities' vulnerability to disasters including persons with disabilities, sensitization is critical

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concurring with: all trials and simulations meant to equip agencies to effectively and efficiently response to disasters and its related issues must include the concerns and rights of persons with disabilities(WOA, 2021).

Taking ownership of strategies

Communities and national development in all aspects including governance require the effective and efficient participation of all regardless of gender, sex, race, ability, disability, etc.(T Maloba, 2019). For all to participate, it demands serious thoughts and calculations to develop the required vision and mission that ultimately create the enthusiasm, space, time; and energy to mobilize and engage all at the various levels without which development will not only be frustrated but will trigger public protests and negative perceptions(Azlan Abas, 2023). Thus, for any development that requires the active participation of all in the community, including persons with disabilities, they must be engaged from the start so that they all feel being part it, owning it, and being their chosen path(Onuma Suphattanakul, 2019) lending support to: to adequately address the fundamental rights of persons with disabilities before, during and after disaster, organizations of persons with disabilities and service providers must take the complete ownership of the process of the formulation of policies, legislations and action plans to better inclusively prevent, prepare for, and respond to disaster(Engelman, Craig, & Iles, 2022).

Physical barriers removal

The safety and security of the population has been a great concern of most people if not all since era of the most modest societies(Evelien Van den Herrewegen, 2010). Sometimes to attain this, depending on the level of socio-economic and political development of a given society, different strategies have been applied that included the construction of walls and gullies that acted as barriers preventing enemies from accessing and conquering communities(Xue Q, Jin X, Cheng Y, Yang X & Y, 2019). Thus, these were useful barriers. However, in the modern world, the barriers that call for immediate removal are those physical structures that highly impede the free movement of persons with disabilities denying them the right to move freely, develop, live productive lives and as well effectively and efficiently participate in national development endeavors(Perkins, 2020). Therefore, for communities including that of persons with disabilities, to remain saved and secured from all calamities, the existing barriers must be eliminated as buttressed: to ensure inclusive and effective disaster management national and local strategies, it is fundamental that the physical barriers are removed, attitudinal barriers eliminated, creation and dissemination of disability friendly information is well articulated and implemented, disaster management institutions and communities are regularly trained on how to work with and also support persons with disabilities; and persons with disabilities actively and effectively participate in all stages of the strategies formulation and implementation(Handicap International Nepal, 2009).

Attitudinal barriers elimination

For a community to feel saved, secured, sure; and valued in any given society that ultimately ushers good health and prosperity in life(J A M Daemen, 2022), the membership must among other things enjoy some degree of unconditional respect, love; and care by all(Eva Kahana, 2020). This condition becomes all the more important in terms of the underprivileged communities including persons with disabilities. The willingness to care and share to a very large extent is associated with positive attitudes and above all, recognition and acceptance of a particular group(Karin Drivenes, 2019). Therefore, to aid inclusive thinking, programming, and implementation of activities to reduce, if not to prevent disadvantaged community including persons with disabilities serious vulnerability to disaster, the elimination of negative social attitudes toward them is fundamental as substantiated: to mitigate the impacts of disasters on persons with disabilities all the service provider agencies and institutions must be physically and social accessible which must be clearly enshrined in all national and regional instruments and action plans and furthermore, they must be timely implemented(WOA, 2021).

Training on disability and related matters

Knowledge whether given to an individual or community is one of the most critical gifts for life an individual or institution can offer(Keith, 2019). With quality and relevant knowledge, an individual or community is set on the path to development(Roland Scherer, 2008). Knowledge can be acquired via various methods, sometimes it can be through pre-services or in-services trainings, in the case of civil servants(Mahmood, 2022). To better serve all communities with effectiveness and efficiency, especially for community development practitioners, it is imperative that they receive some critical training in serving the disadvantaged communities including persons with disabilities particularly in minimizing their vulnerability to calamities and emergency situation such as disaster acceding to: to access quality, relevant; and affordable post-disaster services, all personnels in the service providing institutions including the healthcare agencies should be trained in how to support persons with disabilities during and after disasters(WOA, 2021).

Promotion of human rights principles

The success and safety of any society requires among other things the recognition, observation; and promotion of all the fundamental human rights principles(Modise, 2023). The human rights principles set international standards in relation to all aspects of life being at an individual or community level. Calamities being man-made or natural when strike can be very devastating in many respects; to save communities and their attainments/achievements, governments globally have become obligated not only to observe these principles but to vigorously promote them so

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that nearly everyone especially multinational companies are aware of them and implement them in their engagements(Subhan Ullah, 2021). Thus, to prevent disasters and their associated impacts, it is pivotal the rights of each and every community including persons with disabilities are observed and promoted corroborating: to ensure persons with disabilities are saved from the impacts of disasters, governments and development agencies must implement the United Nations Sustainable Development Goals by strictly promoting and applying the human rights principles of participation, inclusion, empowerment, non-discrimination; and accessibility(WOA, 2021).

Empowerment of organizations of/for persons with disabilities

To prevent or address most societal problems, well organized multitude of partnerships has emerged to be one of the most appropriate approaches(Ans Kolk, 2014). To mobilize and organize communities including that of persons with disabilities structures or institutions are needed which can either be voluntary or non-voluntary(Spyros Angelopoulos, 2023). Like most underprivileged communities, to improve their socio-economic and political welfare, persons with disabilities overall the world for decades have established national, regional; and international organizations(Jobins Joseph, 2021). However, for these organizations to deliver, in partnership with different institutions, they need some form of support which includes but not restricted to financial, material; and human resources empowerment(Nathan John Grills, 2021) as substantiated: actors heeding to international standards to ensure persons with disabilities interests and issues are well articulated in national disaster policies and frameworks, they must be empowered and also organizations of persons with disabilities are well represented in disaster prevention and management structures(WOA, 2021).

Regular conduct of studies

Seemingly, there cannot be development of any type without data as development cannot be registered without some degrees of scientific planning(Dov Dvir, 2003). Thus, to determine the effective contribution of any service delivery in national and communities development there is always a need to conduct some scientific studies to quantify among others, the nature of the issue to be addressed before the commencement of the intervention and the effects of the interventions either midway or at the tail end (Omid Haass, 2019). To better serve persons with disabilities like all other communities, it is fundamental that existing preventive strategies are scientifically interrogated(World Bank Group, 2017) affirming: to better serve persons with disabilities during and after disasters, studies must be regularly conducted that in-depth interrogate all strategies and approaches to determine their effectiveness and rooms for innovation(WOA, 2021).

Poverty reduction

Poverty, though sometimes if not most of the times, difficult to define and measure, understanding it is critical vis-à-vis its negative impacts on individuals, communities; and nations(David Piachaud, 2009). Poverty has been blamed for many social problems including disasters and even other less sophisticated social problems such as reporting late at workplaces, despite the fact that it may not be entirely responsible(Manshor, 2020). However, as documented, poverty has significantly contributed to the current poor relationship between some communities and their natural environment resulting to some degree of contributions in climate changes(Patrick Longobardi, 2016). Thus, to prevent, eliminate or minimize the impacts of social problems in the communities including those of the persons with disabilities, it is fundamental that programs and projects are implemented to reduce if not to eliminate poverty in the communities(Tomsu, 2018). Though the direct contributions of persons with disabilities in climate change can be very minimal, their families' and communities' contributions can be huge as they struggle for their upkeep as family members(Marco Grix, 2022). Thus, reducing poverty among persons with disabilities communities can minimize their vulnerability to disasters as substantiated: persons with disabilities are significantly vulnerable to disaster due to deprivation in its multiple forms, therefore by empowering them academically and financially, there can be some significant reduction in their becoming victims of disasters and emergence situations as they can afford to live in less vulnerable communities and settlements(Khanh That Ton, 2019).

Disability friendly information sharing

Throughout history, access to relevant, quality; and appropriate information has played significant roles in the health(Akintola B Odutola, 2003), socio-economic and political development of societies as knowledge and information is power(anoj Samantray, 2024). For instant, since primitive societies to date, access to information has made other societies conquer and enslaved others giving them the erroneously perceived unlimited rights to exploit and maltreat them for their selfish interest and gains(Carolyn E Lipscomb, 2002). With access to information, others have significantly improved their status as they were able to make the best use of opportunities on time(Panday, 2015). Therefore, access to information is no longer a privilege for few but a fundamental human right for all to enjoy without single iota of discrimination(Michael Riegner, 2017). For any community including that of persons with disabilities, to make the best use of any piece of information to transform lives and living conditions, it must be user friendly as it enhances understanding and timely utilization(Anthony Liew, 2007). To safe communities from calamities and disasters, it is critical that the shared information is timely, accurate, affordable, accessible; and user friendly among others qualities (Alfi Rahman, 2019)affirming: to decrease communities' vulnerable to disaster and emergency situations issues regarding inadequate escape guidelines for people, incomplete geographical information for relief workers; and insufficient on-site information for disaster managers must be addressed with urgency(Tsai, 2012). To able persons with disabilities to be quickly safe and served before, during;

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and after disaster, facilities and infrastructures that are disability sensitive must be built and that is only possible if there is a disaster risk management model involving persons with disabilities based on their full participation via access to relevant, timely, accessible; and accurate information which can be ultimately applied to enable them to enhance their sharing of knowledge and experiences(Winarno & Al, 2021).

Participation in national strategies formulation

To be successful in life in any type of engagement being at local or national level it requires some degree of planning and a clear road map(Elsevier B.V., 2014). This is much more critical when working with a team, being a team member or managing a team. To manage a team to deliver effectively and efficiently, it must take the ownership of the entire program. To take complete ownership, among other things, members must be involved in all the stages of the program development. With such involvements, they feel recognized and valued which is critical in the success of the program and its future continuity with some expansions(L Lund Holm Thomsen, 2024). This is all the more important when working with the disadvantaged communities including persons with disabilities as recognizing their voices also means recognizing their strength and capacities to bring the required changes for a better and inclusive communities(Hannah Tough, 2017) affirming: though there are sharp and growing calls for the involvement of persons with disabilities in the prevention and management of disaster, many communities are not adequately responding due to multitude of reasons such as negative social attitudes, governments and international aids organizations lack of information and knowledge about persons with disabilities, structural barriers to access the physical environment and financial resources; and the unrealistic belief that persons with disabilities is homogenous group(Julie King, 2019). With discrimination, unfounded beliefs; and perceptions about persons with disabilities, they are continuously excluded from actively participating in local and national endeavors to prevent disasters making them highly at risk when disaster and calamity strikes because their views and opinions were not captured during the planning and implementation of strategies(Nepal 2009).

SUMMARY AND CONCLUSION

In a nutshell, to prevent persons with disabilities vulnerability to disasters and emergency situations, the following are fundamental: political will, disability awareness raising, taking ownership of strategies, physical barriers removal, attitudinal barriers elimination, training on disability and related matters, promotion of human rights principles, empowerment of organizations of/for persons with disabilities, regular conduct of studies, poverty reduction, disability friendly information sharing; and participation in national strategies formulation.

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